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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,165	08/29/2001	Akiko Asami	7217/65203	6810

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EXAMINER

GOLINKOFF, JORDAN

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,165

Applicant(s)

ASAMI, AKIKO

Examiner

Jordan S Golinkoff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to because in figure 18, "RDIUS r" should be changed to "RADIUS r". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. Figure 15 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:
 - page 6 – "unit time" should be changed to "unit of time"
 - page 6 – "a long" should be changed to "along"
 - page 10 – "springs" should be changed to "spring"
 - pages 10 and 11 – the term regularity is used but it is not clear what this means in the context of the specification.
 - Page 15 – the term squint is used but it is not clear what this means in the context of the specification.

Appropriate correction is required.

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4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
5. The specification should include line numbers on all pages to facilitate review of subject matter.

Claim Objections

6. Claims 1, 5, 10, and 14 are objected to because of the following informalities:
 - Claims 1 and 5 – “unit time” should be changed to “unit of time”
 - Claims 10 and 14 – “one of moves” should be changed to “moves”
 - Claim 14 – “an other” should be changed to “another”

Appropriate correction is required.

Additionally, all claims should include line numbers to facilitate review of the application.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 11 and 25 recites the limitation "said visual point parallel movement processing" in the third line. There is insufficient antecedent basis for this limitation in the claim.
9. Claims 10, 11, 13, 14, 24, 25, 27, and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the

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invention. Claims 10, 11, 13, and 14 all refer to visual point parallel movement and/or visual line direction modification. Both of these expressions are not clearly defined in the specification and it is unclear the application of these expressions to the claimed invention. Examiner will interpret visual point parallel movement as movement along the axis of the spiral and visual line direction modification as movement of the axis of the spiral.

Claims 24, 25, 27, and 28 are similar in scope to claims 10, 11, 13, and 14, respectively, and are therefore rejected under similar rationale.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 2, 4, 6, 15, 16, 18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hatori et al. ("Hatori," US005977974A).

As per independent claim 1, Hatori teaches an information-processing apparatus comprising: storage means for storing raw data and time-axis data which is related to said raw data and stored in said storage means by being associated with said raw data (column 2, lines 41-44 and column 16, lines 1-8); thumbnail-icon-generating means for generating a thumbnail icon representing said raw data read out at said storage means (column 2, lines 41-44, *i.e.* – *icons represent data*); spiral-period-setting means for setting a spiral period of a virtual spiral on the basis of a predetermined unit time (column 9, lines 51-55); spiral-axis-setting means for setting a

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spiral axis of said virtual spiral on the basis of said predetermined unit time (column 2, lines 45-58, *user can change the time shown*); and thumbnail-icon-array-displaying means for displaying said thumbnail icon in an array on said virtual spiral on the basis of said time-axis data associated with said raw data represented by said thumbnail icon (column 2, lines 41-44).

Claim 15 is similar in scope to claim 1, and is therefore rejected under similar rationale.

As per claim 2, which is dependent on claim 1, Hatori teaches a representative-thumbnail-selecting means for selecting a specific one of a plurality of thumbnail icons displayed as said array on said virtual spiral as a representative thumbnail icon (column 19, lines 40-44); and representative-thumbnail-icon-array-displaying means for displaying said representative thumbnail icon selected by said representative-thumbnail-selecting means in an array on said virtual spiral (column 19, lines 40-44).

Claim 16 is similar in scope to claim 2, and is therefore rejected under similar rationale.

As per claim 4, which is dependent on claim 1, Hatori teaches a thumbnail-icon-extracting means for extracting a specific thumbnail icon from a plurality of thumbnail icons displayed as said array based on said time-axis data on the basis of a predetermined regularity; and data-outputting means for outputting raw data represented by said specific thumbnail icon extracted by said thumbnail-icon-extracting means (column 19, lines 40-44).

Claim 18 is similar in scope to claim 4, and is therefore rejected under similar rationale.

As per claim 6, which is dependent on claim 4, Hatori teaches predetermined regularity includes at least a regularity based on a time axis representing at least hours, days, months or years, a regularity based on temperatures or a regularity based on humidity data (column 19,

lines 10-14).

Claim 20 is similar in scope to claim 6, and is therefore rejected under similar rationale.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 3, 8-12, 17, and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatori et al. ("Hatori," US005977974A) in further view of Miyao et al. ("Miyao," US006466237B1).

As per claim 3, which is dependent on claim 1, the teachings of Hatori in regards to claim 1 have been discussed above. Hatori does not disclose a spiral-layer-synthesizing means for synthesizing a plurality of spiral layers each comprising said virtual spiral, said spiral axis and said thumbnail icons; and synthesized-layer-displaying means for displaying a synthesized layer produced by said spiral-layer-synthesizing means.

Miyao teaches a spiral-layer-synthesizing means for synthesizing a plurality of spiral layers each comprising said virtual spiral, said spiral axis and said thumbnail icons; and synthesized-layer-displaying means for displaying a synthesized layer produced by said spiral-layer-synthesizing means (column 35, lines 5-11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Hatori with a means to display a plurality of spiral layers, as taught by Miyao, with the motivation to more

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quickly find related information by grouping information in distinct information groups (column 34, lines 46-52).

As per claim 8, which is dependent on claim 3, Hatori teaches a visual-point-moving means for arbitrarily moving a visual point of said spiral layer displaying said virtual spiral, said spiral axis and said thumbnail icons (column 12, lines 13-17).

As per claim 9, which is dependent on claim 8, Hatori teaches that the visual-point-moving means automatically moves said visual point of said spiral layer along a time axis (column 10, lines 51-67).

As per claim 10, which is dependent on claim 8, Hatori teaches that the visual-point-moving means moves said visual point of said spiral layer or changes the direction of a visual line of said spiral layer in respectively visual-point parallel-movement processing (column 10, lines 51-67) or visual-line-direction modification processing (column 12, lines 13-21) which is performed in accordance with an operation carried out manually on an operation key set in advance for said visual-point parallel-movement processing or said visual-line-direction modification processing respectively (column 10, lines 51-67 and column 12, lines 13-21).

As per claim 11, which is dependent on claim 8, Hatori teaches that the visual-point-moving means moves said visual point in said visual-point parallel-movement processing in at least the direction of an X, Y or Z axis in a displayed virtual space (column 2, lines 45-53, *i.e.* – *depth* and column 10, lines 51-67).

As per claim 12, which is dependent on claim 8, Hatori teaches that the visual-point-moving means moves said visual point in at least one of yaw, pitch and roll directions in a displayed virtual space (column 12, lines 13-17, *adjusting axis orientation*).

Claims 17, 22-26 are similar in scope to claims 3, and 8-12, respectively, and are therefore rejected under similar rationale.

14. Claims 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over ("Hatori," US005977974A) in further view of de Judicibus (US006163317A).

As per claim 5, which is dependent on claim 1, the teachings of Hatori in regards to claim 1 have been discussed above. Hatori does not disclose that the spiral period's unit time set by said spiral-period-setting means is a one-year unit including a spring, a summer, an autumn and a winter, or a month unit.

de Judicibus teaches that the spiral period's unit time set by said spiral-period-setting means is a one-year unit including a spring, a summer, an autumn and a winter, or a month unit (column 4, lines 27-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Hatori with a means to set the unit of time of a spiral to include years or months, as taught by de Judicibus, with the motivation to allow for more efficient search and retrieval of a large amount of data (column 2, lines 23-27).

Claim 19 is similar in scope to claim 5, and is therefore rejected under similar rationale.

15. Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatori et al. ("Hatori," US005977974A) in further view of Hinckley (US006333753B1).

As per claim 7, which is dependent on claim 2, the teachings of Hatori in regards to claim 2 have been discussed above. Hatori does not disclose that the representative-thumbnail-icon-array-displaying means displays said thumbnail icon as a semitransparent display.

Hinckley teaches that the representative-thumbnail-icon-array-displaying means displays said thumbnail icon as a semitransparent display (column 3, lines 52-56). It would have been

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obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Hatori with a means to display icons in a semitransparent way, as taught by Hinckley, with the motivation to reduce the amount of user interaction required to view information as partially overlapped images can still be viewed without moving the occluding image as the occluding image is semitransparent (column 4, lines 11-15).

Claim 21 is similar in scope to claim 7, and is therefore rejected under similar rationale.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lucas et al. (US005499330A) teach a means to display information using a spiral graphical user interface.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan S Golinkoff whose telephone number is 703-305-8771. The examiner can normally be reached on Monday through Thursday from 8:30 a.m. to 6:00 p.m. and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 703-308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jordan Golinkoff
Patent Examiner
April 12, 2004

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